WHAT IS CLAIMED IS:

1. A single-use disposable lancet device comprising:

a body having an upper portion and a lower portion,

a trigger carried by said upper portion of said body, said trigger movable between a first raised position wherein the device is cocked and a second depressed position wherein the device is fired,

a needle assembly movable between a cocked position and a striking position,

a drive spring for moving said needle assembly from its cocked position to its striking position,

trigger bar means having a first position wherein said trigger bar means holds said needle assembly in its cocked position and having a second position wherein said needle assembly is moved to its striking position by said drive spring,

blade means carried by said trigger, and as said trigger moves from its first position to its second position, said blade means deforms a portion of said trigger bar means whereby said deformed trigger bar means releases said needle assembly from its cocked position and said deformed trigger bar means is thereafter not capable of holding said needle assembly in its cocked position, thereby limiting the device to a single use.

2. The device of claim 1 wherein said trigger bar means is integrally molded as a part of said lower body portion.

3. The device of claim 2 wherein said trigger bar means includes a transverse crossbar, said transverse crossbar having first and second ends, said first and second ends being severed by said blade means when said trigger is moved to said second position.

4. The device of claim 3 wherein said blade means comprises first and second guillotine type blades which sever said first and second ends of said transverse crossbar when the device is fired.

5. The device of claim 1 wherein said needle assembly carries an abutment which bears against said transverse crossbar to hold the device in its cocked position.

6. The device of claim 1 wherein said drive spring comprises a free floating spring and further comprising bounceback spring means integrally formed with said needle assembly.

7. The device of claim 6 wherein said bounceback spring comprises a pair of spring arms.

8. The device of claim 7 wherein each of said spring arms is generally V-shaped.

9. The device of claim 1 wherein said trigger bar means is compressible by said blade means, and said trigger bar means has a first extended position in which the device is cocked and a second compressed position in which the device is fired.

10. The device of claim 1 wherein said trigger comprises:

a one-way trigger button molded into said upper portion of said body, said trigger button having a first raised and cocked position and a second depressed and firing position, said trigger button having distal and proximal ends pivotally connected to said body, said trigger button having a running length that exceeds the distance between said proximal and distal ends, so that said trigger button is stable only in its first and second positions and is unstable at any intermediate position.

11. A single-use disposable lancet device comprising:

a body having an upper portion and a lower portion,

a trigger carried by said upper portion of said body, said trigger movable between a first raised position in which the device is cocked and a second depressed position in which the device is fired,

a needle assembly movable between a cocked position and a striking position,

a drive spring for moving said needle assembly from its cocked position to its striking position,

trigger bar means having a first position wherein said trigger bar means holds said needle assembly in its cocked position and having a second position wherein said needle assembly is movable to its striking position by said drive spring,

blade means carried by said trigger, and as said trigger moves from its first position to its second position, said blade means severs a portion of said trigger bar means causing said partially severed trigger bar means to release said needle assembly from its cocked position and thereafter preventing said partially severed trigger bar means from holding said needle assembly in its cocked position, thereby limiting the device to a single use.

12. The device of claim 11 wherein said trigger bar means is integrally molded as a part of said lower body portion.

13. The device of claim 12 wherein said trigger bar means includes a transverse crossbar, said transverse crossbar having first and second ends, said first and second ends being severed by said blade means when said trigger is moved to said second position.

14. The device of claim 13 wherein said blade means comprises first and second guillotine type blades which sever said first and second ends of said transverse crossbar when the device is fired.

15. The device of claim 14 wherein said trigger bar means includes a support stem to prevent said transverse crossbar from falling out of said body after said first and second ends are severed.

16. The device of claim 11 wherein said needle assembly carries an abutment which bears against said transverse crossbar to hold the device in its cocked position.

17. The device of claim 11 wherein said drive spring comprises a free floating spring and further comprising bounceback spring means integrally formed with said needle assembly.

18. The device of claim 17 wherein said bounceback spring comprises a pair of generally V-shaped spring arms.

19. The device of claim 11 wherein said trigger comprises:

a one-way trigger button molded into said upper portion of said body, said trigger button having a first retracted and cocked position and a second depressed and firing position, said trigger button having distal and proximal ends pivotally connected to said upper portion of said body, said trigger button having a running length that exceeds the distance between said proximal and distal ends, so that said trigger button is stable only in its first and second positions and is unstable at any intermediate position.

20. A single-use disposable lancet device comprising:

a body having an upper portion and a lower portion,

a trigger carried by said upper portion of said body, said trigger movable between a first raised position in which the device is cocked and a second depressed position in which the device is fired,

a needle assembly movable between a cocked position and a striking position,

a free-floating drive spring for moving said needle assembly from its cocked position to its striking position,

a bounceback spring means integrally formed with said needle assembly,

trigger bar means having a first position wherein said trigger bar means holds said needle assembly in its cocked position and having a second position wherein said needle assembly is moved to its striking position by said drive spring,

blade means carried by said trigger, and as said trigger moves from its first position to its second position, said blade means severs a portion of said trigger bar means whereby said partially severed trigger bar means releases said needle assembly from its cocked position and said partially severed trigger bar means is thereafter not capable of holding said needle assembly in its cocked position, thereby limiting the device to a single use.

21. The device of claim 20 wherein each of said spring arms is generally V-shaped.

22. The device of claim 20 wherein said trigger bar means includes a support stem and a transverse crossbar, said transverse crossbar having first and second ends, said first and second ends being severed by said blade means when said trigger is moved to said second position.

23. The device of claim 22 wherein said blade means comprises first and second guillotine-type blades which sever said first and second ends of said transverse crossbar when the device is fired.

24. The device of claim 20 wherein said trigger comprises:

a one-way trigger button molded into said upper portion of said body, said trigger button having a first retracted and cocked position and a second depressed and firing position, said trigger button having distal and proximal ends pivotally connected to said upper portion of said body, said trigger button having a running length that exceeds the distance between said proximal and distal ends, so that said trigger button is stable only in its first and second positions and is unstable at any intermediate position.

25. A single-use disposable lancet device comprising:

a body having an upper portion and a lower portion,

a trigger carried by said upper portion of said body, said trigger movable between a first raised position in which the device is cocked and a second depressed position in which the device is fired,

a needle assembly movable between a cocked position and a striking position,

a drive spring for moving said needle assembly from its cocked position to its striking position,

trigger bar means having a first position wherein said trigger bar means holds said needle assembly in its cocked position and having a second position wherein said needle assembly is moved to its striking position by said drive spring,

blade means carried by said trigger, and as said trigger moves from its first position to its second position, said blade means irreparably breaks a portion of said trigger bar means whereby said broken trigger bar means releases said needle assembly from its cocked position and said broken trigger bar means is thereafter not capable of holding said needle assembly in its cocked position, thereby limiting the device to a single use.

26. The apparatus of claim 25 wherein a trigger bar is integrally molded as part of said lower body portion

27. The apparatus of claim 25 wherein the depressible trigger button carries two vertical blades which sever a portion of said trigger bar means when the trigger button is depressed.

28. The apparatus of claim 25 wherein an abutment on the needle assembly contacts said trigger bar means and holds said needle assembly in its cocked position.

29. The apparatus of claim 25 in which a support stem is molded onto the trigger bar and is bendable downward when the device is fired, thereby retaining the trigger bar within the body of the device.

30. The apparatus of claim 25 wherein the top of the trigger button is concave.

31. The apparatus of claim 25 wherein said trigger has an over-the-center motion when pressed, thereby holding the button down after the device is fired.

32. The apparatus of claim 25 in which two integrally molded lateral arms on the carrier cause a bounceback of the lancet following a skin puncture.

33. The apparatus of claim 25 in which the needle point is covered with a twist off cap integrally molded with the needle carrier.

34. In a lancet device for drawing a capillary blood sample, wherein a needle assembly is carried within a body, and said needle assembly is movable between a cocked position, a striking position and an at rest position, the improvement comprising:

a free floating mainspring means for driving said needle assembly from its cocked position to its striking position, and

bounceback spring means carried by said needle assembly for returning said needle assembly from said striking position to said at rest position, said bounceback spring means being integrally formed with said needle assembly.

35. The device of claim 34 wherein said bounceback spring means comprises a pair of spring arms.

36. The device of claim 35 wherein each of said spring arms is generally V-shaped.

37. The device of claim 34 wherein said mainspring means comprises a metallic, helical spring.

38. The device of claim 37 wherein said body has a front wall and a back wall, and said metallic, helical spring has a distal end and a proximal end, and wherein said distal end seats against said needle assembly and said proximal end seats against said back wall of said body.

39. The method of automatically assembling a lancet device in a cocked position, wherein the components of said lancet device include an upper body portion having proximal and distal ends, a lower body portion having proximal and distal ends, a mainspring and a needle assembly having a removable tailpiece, and wherein an opening is formed in said proximal ends of one or both of said body portions of said device for temporarily receiving said tailpiece, comprising the steps:

supporting said lower body portion,

automatically loading said mainspring onto said tailpiece,

automatically compressing said mainspring on said tailpiece,

automatically and temporarily holding said compressed mainspring on said tailpiece,

automatically loading said needle assembly with said compressed mainspring into said lower body portion,

automatically closing the device by attaching said upper body portion to said lower body portion, and

severing said tailpiece from said needle assembly, leaving said cocked mainspring in position ready to cause said needle assembly to fire.

40. The method of claim 39 wherein said mainspring is compressed and held on said tailpiece by an automatic compression tool, and wherein said automatic compression tool is withdrawn through said opening after the device is closed.

41. The method of assembling a lancet device in a cocked position, wherein the components of said lancet device include an upper body portion having proximal and distal ends, a lower body portion having proximal and distal ends, a mainspring and a needle assembly having a removable tailpiece, and wherein an opening is formed in said proximal ends of one or both of said body portions of said device for temporarily receiving said tailpiece, comprising the steps:

supporting said lower body portion,

loading said mainspring onto said tailpiece,

compressing said mainspring on said tailpiece,

temporarily holding said compressed mainspring on said tailpiece,

loading said needle assembly with said compressed mainspring into said lower body portion,

closing the device by attaching said upper body portion to said lower body portion, and

severing said tailpiece from said needle assembly, leaving said cocked mainspring in position ready to cause said needle assembly to fire.

42. The method of claim 41 wherein said mainspring is compressed and held on said tailpiece by a compression tool, and wherein said compression tool is withdrawn through said opening after the device is closed.

43. In a single-use disposable lancet device having a body with upper and lower portions, a needle assembly movable between a cocked position and a striking position, and a drive spring for advancing said needle assembly, the improvement comprising:

a one-way trigger button molded into said upper portion of said body, said trigger button having a first retracted and cocked position and a second depressed and firing position, said trigger button having distal and proximal ends pivotally connected to said body, said trigger button having a running length that exceeds the distance between said proximal and distal ends, so that said trigger button is stable only in its first and second positions and is unstable at any intermediate position.

44. The device of claim 43 wherein said trigger button comprises three segments, a first segment forming said distal end of said trigger button which is concave and adapted to comfortably receive a user's fingertip, a second segment forming said proximal end of said trigger button, and a third segment which is positioned between said first and second segments.

45. The device of claim 44 wherein said third segment is inclined between said first and second segments.

46. The device of claim 45 wherein said three segments create an over-the-center motion of said trigger, wherein said trigger is unstable at intermediate positions between said cocked and firing positions.

47. The device of claim 46, wherein said trigger button remains in its depressed firing position after the device is fired.